

CLAIMS

1. An apparatus for coupling a peripheral device to a host comprising:

an interface circuit configured to receive a request from said host and present a response to said host; and

5 a logic circuit configured to (i) generate said response when said request is serviceable by said apparatus or (ii) pass said request to an external circuit when said request is not serviceable by said apparatus.

2. The apparatus according to claim 1, wherein said interface circuit comprises a serial interface engine (SIE).

3. The apparatus according to claim 1, wherein said external circuit comprises a processor.

4. The apparatus according to claim 3, wherein said external circuit comprises a processor selected from the group consisting of a digital signal processor (DSP), a microprocessor, and an application specific integrated circuit (ASIC).

5. The apparatus according to claim 1, wherein said apparatus comprises a universal serial bus (USB) peripheral device.

6. The apparatus according to claim 1, wherein said logic circuit is configured to generate said response to said request using information received from said external circuit.

7. The apparatus according to claim 6, wherein said information comprises a descriptor table.

8. The apparatus according to claim 1, wherein said logic circuit is configured to service an enumeration request.

9. The apparatus according to claim 1, wherein said request comprises a request as defined in Chapter 9 of the Universal Serial Bus (USB) Specification, revision 2.0.

10. The apparatus according to claim 1, wherein said logic circuit is configured to pass to said external circuit a request selected from the group consisting of a class request, a

0325.00459  
CD01002

5 vendor request, a custom driver request, and requests implemented  
to support USB specification changes and enhancements.

11. The apparatus according to claim 1, wherein said  
response from said external circuit comprises a stall signal.

12. An apparatus comprising:

5 means for receiving a request from a host and presenting  
a response to said host; and

means for (i) generating said response when said request  
is serviceable by said apparatus or (ii) passing said request to an  
external circuit when said request is not serviceable by said  
apparatus.

13. A method for interfacing a peripheral device to a  
host comprising the steps of:

receiving a request from said host;

5 directly responding to said request when said request is  
recognized;

when said request is not recognized, passing said request  
to an external circuit;

0325.00459  
CD01002

receiving a response from said external circuit; and  
passing on said response to said host.

14. The method according to claim 13, wherein said response from said external processor comprises a stall command.

15. The method according to claim 13, wherein said external circuit comprises a processor selected from the group consisting of a digital signal processor (DSP), a microprocessor, and an application specific integrated circuit (ASIC).

16. The method according to claim 13, wherein said requests are received via a serial bus in accordance with the Universal Serial Bus (USB) Specification, revision 1.0, 1.1, or 2.0.

17. The method according to claim 13, wherein said USB request comprises an enumeration request.

18. The method according to claim 13, wherein said request presented to said external circuit comprises a request

0325.00459  
CD01002

selected from the group consisting of a class request, a vendor  
request, a custom driver request, and a request implemented to  
5 support changes and/or enhancements to a communication protocol.

19. The method according to claim 13, wherein said  
response from said external circuit comprises a stall response.

20. The method according to claim 13, further comprising  
the step of receiving one or more descriptor tables from said  
external circuit.